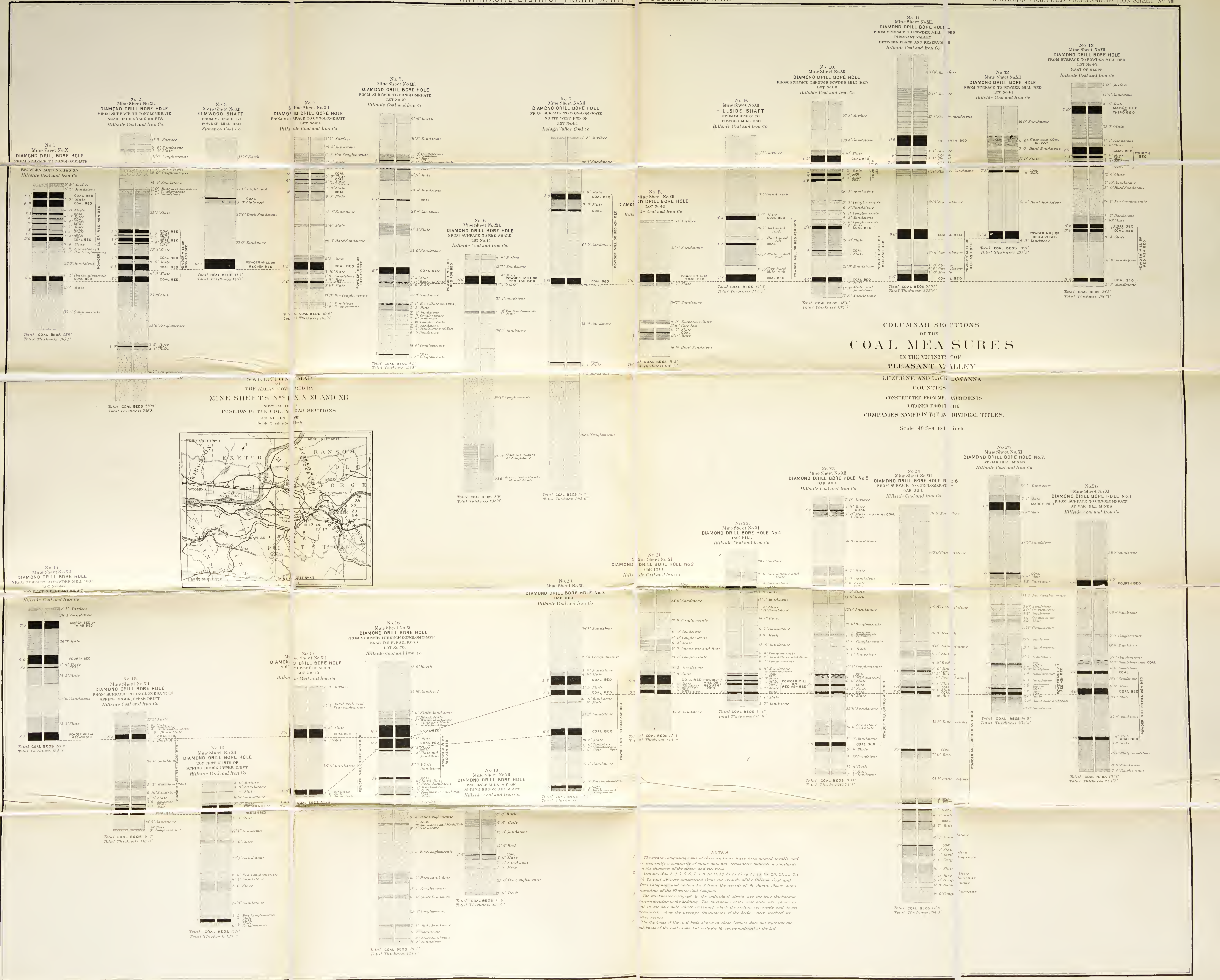
GEOLOGICAL SURVEY OF PENNSYLVANIA, J. P. LESLEY, STATE GEOLOGIST

ANTHRACITE DISTRICT FRANK A. HILL GEOLOGIST IN CHARGE


No. 1 Mine Sheet No. X DIAMOND DRILL BORE HOLE FROM SURFACE TO CONGLOMERATE BETWEEN LOTS No. 34 & 35 Hillside Coal and Iron Co
No. 2 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO CONGLOMERATE NEAR HEIDLEBERG DRIFTS Hillside Coal and Iron Co.
No. 3 Mine Sheet No. XII ELMWOOD SHAFT FROM SURFACE TO POWDER MILL BED Florence Coal Co.
No. 4 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO CONGLOMERATE Hillside Coal and Iron Co
No. 5 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO CONGLOMERATE LOT No. 40 Hillside Coal and Iron Co
No. 6 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO RED SHALE LOT No. 41 Hillside Coal and Iron Co.
No. 7 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO CONGLOMERATE NORTH WEST END OF LOT No. 43 Lehigh Valley Coal Co.
No. 8 Mine Sheet No. XII DIAMOND DRILL BORE HOLE LOT No. 42 Hillside Coal and Iron Co
No. 9 Mine Sheet No. XII HILLSIDE SHAFT FROM SURFACE TO POWDER MILL BED Hillside Coal and Iron Co
No. 10 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE THROUGH POWDER MILL BED LOT No. 58 Hillside Coal and Iron Co
No. 11 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO POWDER MILL BED PLEASANT VALLEY BETWEEN PLANE AND RESERVOIR Hillside Coal and Iron Co
No. 12 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO POWDER MILL BED LOT No. 44 Hillside Coal and Iron Co
No. 13 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO POWDER MILL BED LOT No. 46 EAST OF SLOPE Hillside Coal and Iron Co.
No. 14 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO POWDER MILL BED Hillside Coal and Iron Co
No. 15 Mine Sheet No. XII DIAMOND DRILL BORE HOLE FROM SURFACE TO CONGLOMERATE SPRING BROOK UPPER DRIFT Hillside Coal and Iron Co
No. 16 Mine Sheet No. XII DIAMOND DRILL BORE HOLE 200 FEET NORTH OF SPRING BROOK UPPER DRIFT Hillside Coal and Iron Co.
No. 17 Mine Sheet No. XII DIAMOND DRILL BORE HOLE LOT No. 45 Hillside Coal and Iron Co
No. 18 Mine Sheet No. XI DIAMOND DRILL BORE HOLE FROM SURFACE THROUGH CONGLOMERATE NEAR D.& H. RAIL ROAD LOT No. 70 Hillside Coal and Iron Co
No. 19 Mine Sheet No. XII DIAMOND DRILL BORE HOLE ONE HALF MILE S.E. OF SPRING BROOK AIR SHAFT Hillside Coal and Iron Co.
No. 20 Mine Sheet No. XI DIAMOND DRILL BORE HOLE No. 3 OAK HILL Hillside Coal and Iron Co
No. 21 Mine Sheet No. XI DIAMOND DRILL BORE HOLE No. 2 OAK HILL Hillside Coal and Iron Co
No. 22 Mine Sheet No. XI DIAMOND DRILL BORE HOLE No. 4 OAK HILL Hillside Coal and Iron Co
No. 23 Mine Sheet No. XII DIAMOND DRILL BORE HOLE No. 5 OAK HILL Hillside Coal and Iron Co
No. 24 Mine Sheet No. XII DIAMOND DRILL BORE HOLE No. 6 FROM SURFACE TO CONGLOMERATE OAK HILL Hillside Coal and Iron Co
No. 25 Mine Sheet No. XI DIAMOND DRILL BORE HOLE No. 7 AT OAK HILL MINES Hillside Coal and Iron Co
No. 26 Mine Sheet No. XI DIAMOND DRILL BORE HOLE No. 1 FROM SURFACE TO CONGLOMERATE AT OAK HILL MINES Hillside Coal and Iron Co
POWDER MILL OR RED ASH BED
MARCY BED OR THIRD BED
FOURTH BED
COAL BED
MINE SHEET No IX
MINE SHEET No XI
MINE SHEET No XII
EXETER
RANSOM
OLD FORGE
WYOMING
WEST PITTSTON
PITTSTON
LACKAWANNA

COLUMNAR SECTIONS OF THE COAL MEASURES IN THE VICINITY OF PLEASANT VALLEY LUZERNE AND LACKAWANNA COUNTIES

CONSTRUCTED FROM MEASUREMENTS
OBTAINED FROM THE
COMPANIES NAMED IN THE INDIVIDUAL TITLES.

Scale: 40 feet to 1 inch.

SKELETON MAP OF THE AREAS COVERED BY MINE SHEETS Nos. IX, X, XI AND XII

SHOWING THE
POSITION OF THE COLUMNAR SECTIONS
ON SHEET VIII
Scale 2 miles to 1 inch

NOTES

1 The strata composing some of these sections have been named locally and consequently a similarity of name does not necessarily indicate a similarity in the character of the strata and vice versa.

2 Sections Nos 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 and 26 were constructed from the records of the Hillside Coal and Iron Company and Section No 3 from the records of Mr Austin Moore Superintendent of the Florence Coal Company.

3 The thicknesses assigned to the individual strata are the true thicknesses perpendicular to the bedding. The thicknesses of the coal beds are shown as cut in the bore hole, shaft or tunnel which the section represents and do not necessarily show the average thicknesses of the beds where worked at other points.

4 The thickness of the coal beds shown in these Sections does not represent the thickness of the coal alone, but includes the refuse material of the bed.

WILLIAM GRIFFITH Assistant Geologist

ROBERT A. QUIN
WILBUR F. SMITH
GEORGE W. MILNES
EDWARD M. KEATLEY
Assistants

Scale of Coal Measure Sections 40 feet to 1 Inch.

E. R. MEYERS STATE ENGINEER

REFERENCE SURVEY MAPS AND SECTIONS
NORTHERN COAL FIELD MINE SHEETS Nos. IX, X, XI AND XII; CROSS SECTION SHEETS

ATLAS NORTHERN ANTHRACITE FIELD. PART 2. COLUMNAR SECTION SHEET NO. VII. 9.

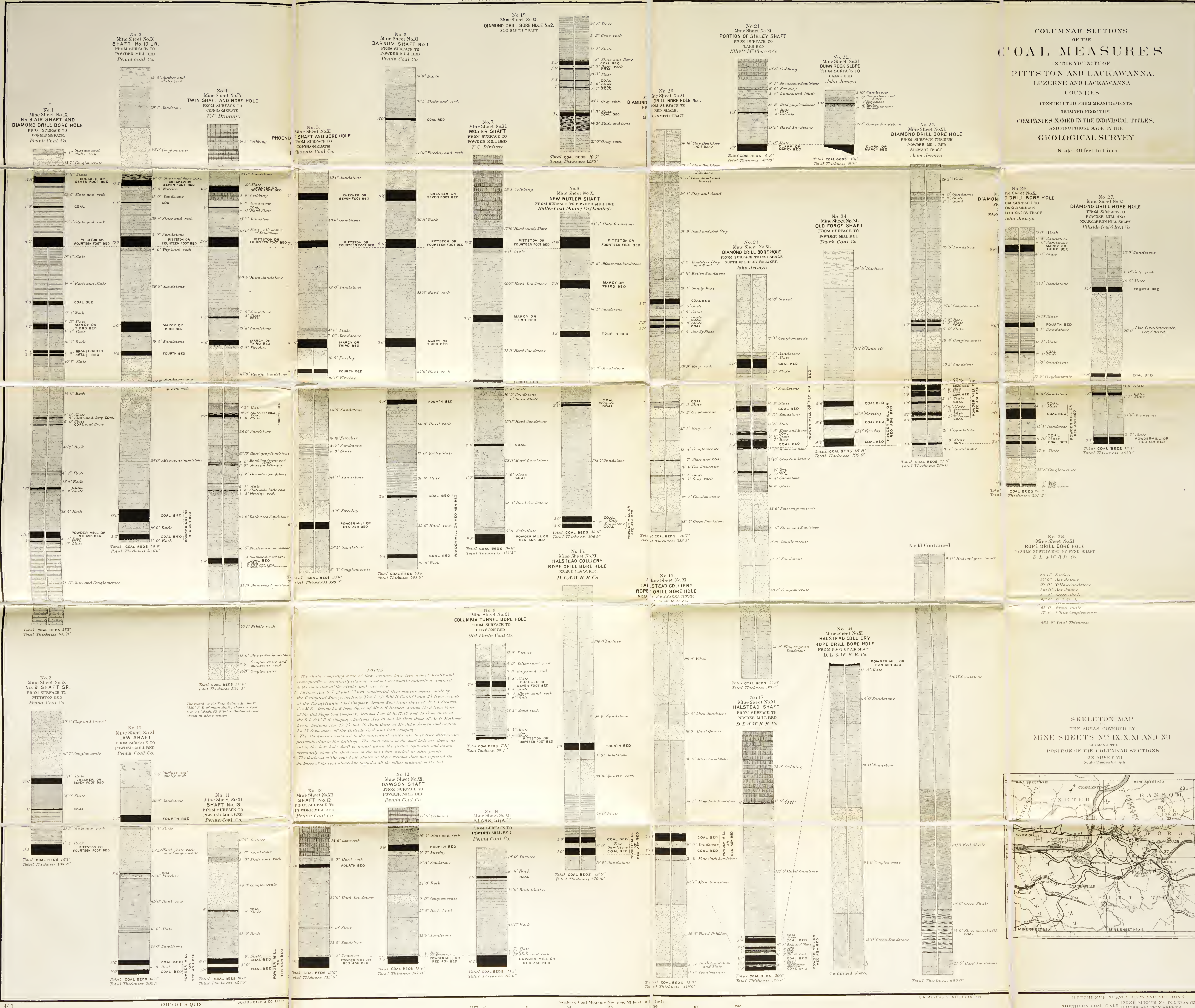
A.A.
Geology
557
P38m
AA
Atlas
v.1, pt.2

GEOLOGICAL SURVEY OF PENNSYLVANIA. J. P. LESLEY, STATE GEOLOGIST

ANTHRACITE DISTRICT. FRANK A HILL, GEOLOGIST IN CHARGE

COLUMNAR SECTIONS
OF THE
COAL MEASURES
IN THE VICINITY OF
PITTSTON AND LACKAWANNA,
LUZERNE AND LACKAWANNA
COUNTIES
CONSTRUCTED FROM MEASUREMENTS
OBTAINED FROM THE
COMPANIES NAMED IN THE INDIVIDUAL TITLES,
AND FROM THOSE MADE BY THE
GEOLOGICAL SURVEY

Scale. 40 feet to 1 inch


No. 1 Mine Sheet No. IX. No. 9 AIR SHAFT AND DIAMOND DRILL BORE HOLE FROM SURFACE TO CONGLOMERATE Penna Coal Co.
No. 2 Mine Sheet No. IX. No. 9 SHAFT SR. FROM SURFACE TO PITTSTON BED Penna Coal Co.
No. 3. Mine Sheet No. IX SHAFT No. 10 JR. FROM SURFACE TO POWDER MILL BED Penna Coal Co.
No. 4 Mine Sheet No. IX. TWIN SHAFT AND BORE HOLE FROM SURFACE TO CONGLOMERATE F. C. Dininny.
No. 5. Mine Sheet No. XI PHOENIX SHAFT AND BORE HOLE FROM SURFACE TO CONGLOMERATE. Phoenix Coal Co.
No. 6 Mine Sheet No. XI. BARNUM SHAFT No 1 FROM SURFACE TO POWDER MILL BED Penna Coal Co
No. 7. Mine Sheet No. XI. MOSIER SHAFT FROM SURFACE TO POWDER MILL BED F. C. Dininny.
No. 8. Mine Sheet No. X. NEW BUTLER SHAFT FROM SURFACE TO POWDER MILL BED Butler Coal Mining Co. (Limited)
No. 9. Mine Sheet No. XI COLUMBIA TUNNEL BORE HOLE FROM SURFACE TO PITTSTON BED Old Forge Coal Co.
No. 10 Mine Sheet No. XI. LAW SHAFT FROM SURFACE TO POWDER MILL BED Penna Coal Co.
No. 11 Mine Sheet No. XI. SHAFT No. 13 FROM SURFACE TO POWDER MILL BED Penna Coal Co.
No. 12 Mine Sheet No. XII SHAFT No. 12 FROM SURFACE TO POWDER MILL BED Penna Coal Co
No. 13 Mine Sheet No. XII. DAWSON SHAFT FROM SURFACE TO POWDER MILL BED Penna Coal Co
No. 14 Mine Sheet No. XII STARK SHAFT FROM SURFACE TO POWDER MILL BED Penna Coal Co.
No. 15 Mine Sheet No. XI. HALSTEAD COLLIERY ROPE DRILL BORE HOLE NEAR D. L. & W. R. R. D. L. & W. R. R. Co.
No. 16 Mine Sheet No. XI HALSTEAD COLLIERY ROPE DRILL BORE HOLE NEAR LACKAWANNA RIVER
No. 17 Mine Sheet No. XI. HALSTEAD SHAFT FROM SURFACE TO POWDER MILL BED D. L. & W. R. R. Co.
No. 18 Mine Sheet No. XI HALSTEAD COLLIERY ROPE DRILL BORE HOLE FROM FOOT OF AIR SHAFT D. L. & W. R. R. Co.
No. 18 Continued
No. 19 Mine Sheet No. XI. DIAMOND DRILL BORE HOLE No. 2. M. G. SMITH TRACT
No. 20 Mine Sheet No. XI. DIAMOND DRILL BORE HOLE No. 1. FROM SURFACE TO RED SHALE. M. G. SMITH TRACT
No. 21 Mine Sheet No. XI. PORTION OF SIBLEY SHAFT FROM SURFACE TO CLARK BED Elliott McClure & Co
No. 22. Mine Sheet No. XI. DUNN ROCK SLOPE FROM SURFACE TO CLARK BED John Jermyn
No. 23 Mine Sheet No. XI. DIAMOND DRILL BORE HOLE FROM SURFACE TO RED SHALE SOUTH OF SIBLEY COLLIERY. John Jermyn
No. 24 Mine Sheet No. XI. OLD FORGE SHAFT FROM SURFACE TO POWDER MILL BED Penna Coal Co
No. 25 Mine Sheet No. XI. DIAMOND DRILL BORE HOLE FROM SURFACE THROUGH POWDER MILL BED STEWART TRACT John Jermyn
No. 26 Mine Sheet No. XI DIAMOND DRILL BORE HOLE FROM SURFACE TO CONGLOMERATE MASSACHUSETTS TRACT. John Jermyn
No. 27. Mine Sheet No. XI. DIAMOND DRILL BORE HOLE FROM SURFACE TO POWDER MILL BED NEAR CARBON HILL SHAFT Hillside Coal & Iron Co.
No. 28. Mine Sheet No. XI ROPE DRILL BORE HOLE ¾ MILE NORTHWEST OF PYNE SHAFT D. L. & W. R. R. Co.
CHECKER OR SEVEN FOOT BED
PITTSTON OR FOURTEEN FOOT BED
MARCY OR THIRD BED
FOURTH BED
POWDER MILL OR RED ASH BED
CLARK OR MARCY BED
Continued above
SKELETON MAP

NOTES.

1 The strata composing some of these sections have been named locally and consequently a similarity of name does not necessarily indicate a similarity in the character of the strata and vice versa

2 Sections Nos 4 7 21 and 22 were constructed from measurements made by the Geological Survey. Sections Nos. 1, 2, 3 6, 10, 11 12, 13, 14 and 24 from records of the Pennsylvania Coal Company, Section No. 5 from those of Mr I A Stearns, C & M E, Section No 8 from those of Mr S B Bennett Section No 9 from those of the Old Forge Coal Company, Sections Nos 15 16, 17, 18 and 28 from those of the D L & W R R Company, Sections Nos 19 and 20 from those of Mr G Mortimer Lewis Sections Nos. 23 25 and 26 from those of Mr John Jermyn and Section No 27 from those of the Hillside Coal and Iron Company

3. The thicknesses assigned to the individual strata are their true thicknesses perpendicular to the bedding The thicknesses of the coal beds are shown as cut in the bore hole, shaft or tunnel which the section represents and do not necessarily show the thickness of the bed when worked at other points

4 The thickness of the coal beds shown in these sections does not represent the thickness of the coal alone, but includes all the refuse material of the bed

SKELETON MAP
OF
THE AREAS COVERED BY
MINE SHEETS Nos. IX, X, XI AND XII
SHOWING THE
POSITION OF THE COLUMNAR SECTIONS
ON SHEET VII
Scale 2 miles to 1 inch

Scale of Coal Measure Sections 40 Feet to 1 Inch

1/480 of Nature

JANUARY 1888

WILLIAM GRIFFITH Assistant Geologist

Assistants
ROBERT A QUIN
WILBUR F SMITH
GEORGE W MILNES
EDWARD M KEATLEY

JULIUS BIEN & CO LITH

E K MEYERS STATE PRINTER

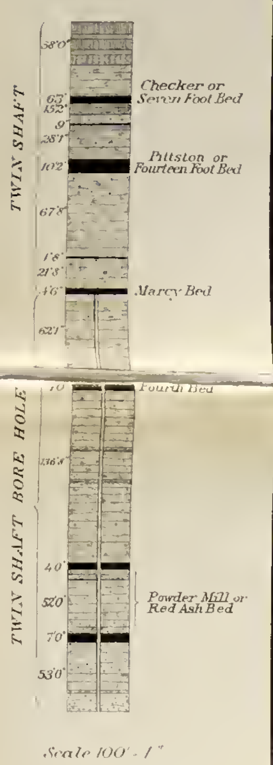
WYOMING BASIN, LUZERNE AND LACKAWANNA COUNTIES

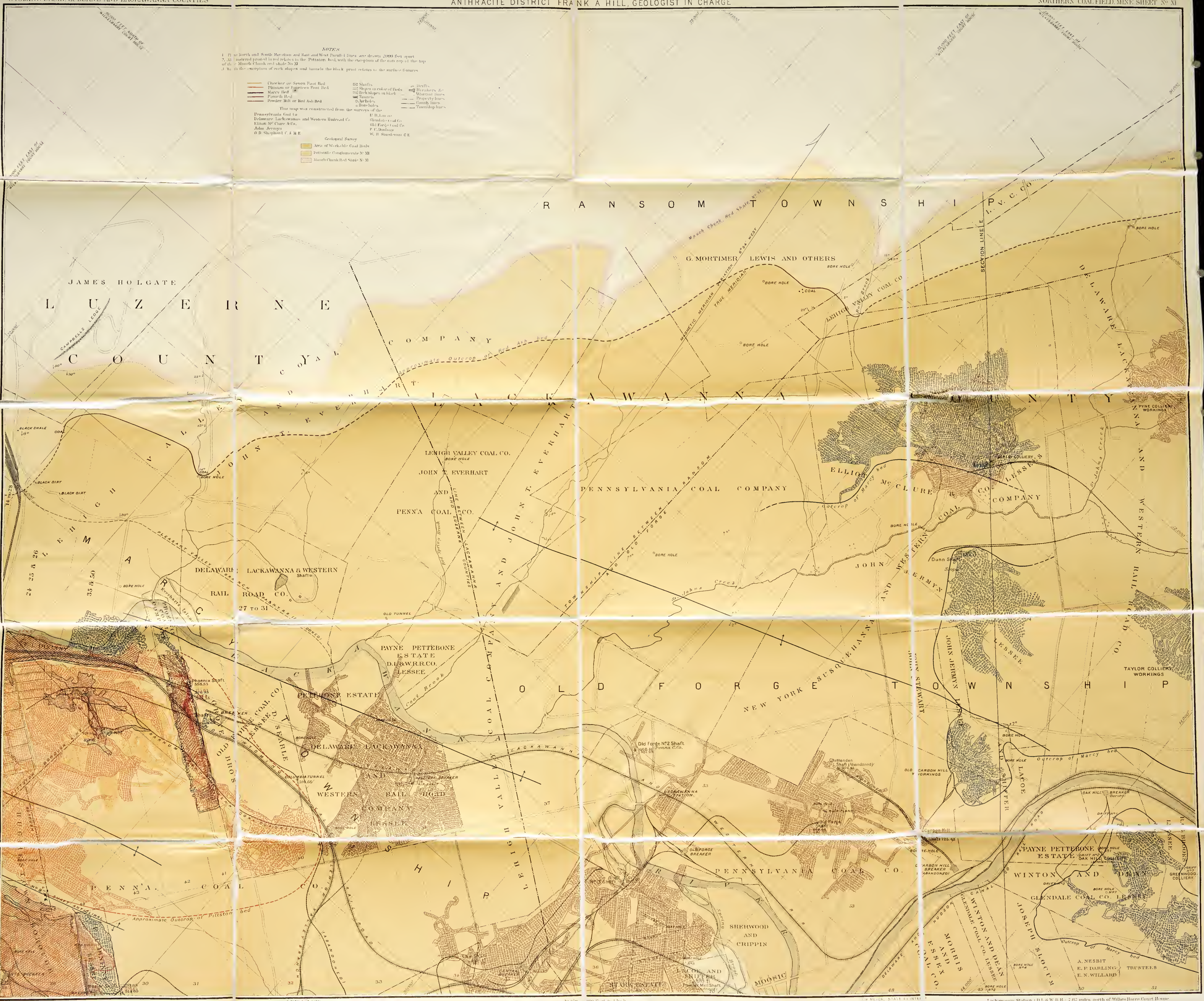
GEOLOGICAL SURVEY OF PENNSYLVANIA. J. P. LESLEY, STATE GEOLOGIST

ANTHRACITE DISTRICT FRANK A. HILL, GEOLOGIST IN CHARGE

NORTHERN COAL FIELD, MINE SHEET Nº XI

SECTION OF COAL MEASURES
LACKAWANNA SHEET.
TWIN SHAFT AND BORE HOLE
F. C. DININNY


TWIN SHAFT
Checker or Seven Foot Bed
Pittston or Fourteen Foot Bed
Marcy Bed
Fourth Bed
TWIN SHAFT BORE HOLE
Powder Mill or Red Ash Bed
Scale 100' = 1"


NOTES
1. The North and South Meridian and East and West Parallel lines are drawn 2000 feet apart
2. All material printed in red relates to the Pittston bed, with the exception of the outcrop of the top of the Mauch Chunk red shale No XI
3. With the exception of rock slopes and tunnels the black print relates to the surface features
Checker or Seven Foot Bed
Pittston or Fourteen Foot Bed
Marcy Bed
Fourth Bed
Powder Mill or Red Ash Bed
Shafts
Slopes in color of Beds
Rock Slopes in black
Tunnels
Air holes
Bore holes
Drifts
Breakers &c
Warrant lines
Property lines
County lines
Township lines
This map was constructed from the surveys of the
Pennsylvania Coal Co
Delaware Lackawanna and Western Railroad Co
Elliott McClure & Co.
John Jermyn
O. D. Shepherd C. & M. E.
E. D. Lacoe
Glendale Coal Co
Old Forge Coal Co
F. C. Dininny
W. H. Sturdevant C. E.
Geological Survey
Area of Workable Coal Beds
Pottsville Conglomerate Nº XII
Mauch Chunk Red Shale Nº XI
RANSOM TOWNSHIP
G. MORTIMER LEWIS AND OTHERS
LEHIGH VALLEY COAL CO.
JAMES HOLGATE
LUZERNE
COUNTY
CAMPBELLS LEDGE
LEHIGH VALLEY COAL COMPANY
JOHN T. EVERHART
Approximate Outcrop of Red Ash bed
LACKAWANNA COUNTY
DELAWARE LACKAWANNA AND WESTERN RAIL ROAD CO.
LEHIGH VALLEY COAL CO.
JOHN T. EVERHART
AND
PENN'A COAL CO.
PENNSYLVANIA COAL COMPANY
ELLIOTT McCLURE & CO. LESSEE
COMPANY
JOHN JERMYN
MARCY TOWNSHIP
DELAWARE LACKAWANNA & WESTERN RAIL ROAD CO.
27 to 31
PAYNE PETTEBONE ESTATE
D.L.&W.R.R.CO. LESSEE
PETTEBONE ESTATE
OLD FORGE TOWNSHIP
NEW YORK SUSQUEHANNA AND WESTERN COAL CO.
TAYLOR COLLIERY WORKINGS
PYNE COLLIERY WORKINGS
Phoenix Shaft
Old Forge Nº2 Shaft
DELAWARE LACKAWANNA AND WESTERN RAIL ROAD COMPANY LESSEE
PENN'A COAL CO.
Approximate Outcrop of Pittston bed
PENNSYLVANIA COAL CO.
SHERWOOD AND CRIPPIN
LACOE AND SHIFFER
Powder Mill Shaft (abandoned)
MOOSIC
STARK ESTATE
PAYNE PETTEBONE ESTATE
WINTON AND DEAN
GLENDALE COAL CO. LESSEE
MORRIS AND ESSEX COAL CO.
JOSEPH SLOCUM
A. NESBIT
E. P. DARLING
E. N. WILLARD
TRUSTEES
GREENWOOD COLLIERY
Outcrop of Marcy bed
SECTION LINE
BORE HOLE

421 GEORGE M. LEHMAN, Assistant to July 1st 1887
A. D. W. SMITH
EDWARD M. KEATLEY,
J. F. MERKLE
BOND V. SOMERVILLE.
Aids

WILLIAM GRIFFITH Assistant Geologist (since July 1st 1887)

ROBERT A. QUIN,
WILBER F. SMITH,
GEORGE W. MILNES
HENRY L. CURTIS,
Assistants

JULIUS BIEN & CO. LITH

Scale 800 Feet to 1 Inch

AUGUST, 1887.

E. K. MEYER, STATE PRINTER

Lackawanna Station (D. L. & W. R. R.) 7.87 miles north of Wilkes Barre Court House
7.05 east
Latitude of Monument, Wilkes Barre Court House yard observed
Longitude east of Washington

ANTHRACITE FIELD. PART 2. MINE SHEET NO. X. 4.

AA.

557
P3m
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atlas
v.1, pt2

Geology

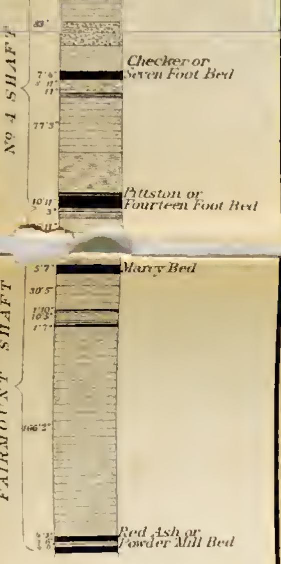
WYOMING BASIN, LUZERNE COUNTY.

GEOLOGICAL SURVEY OF PENNSYLVANIA. J. P. LESLEY, STATE GEOLOGIST

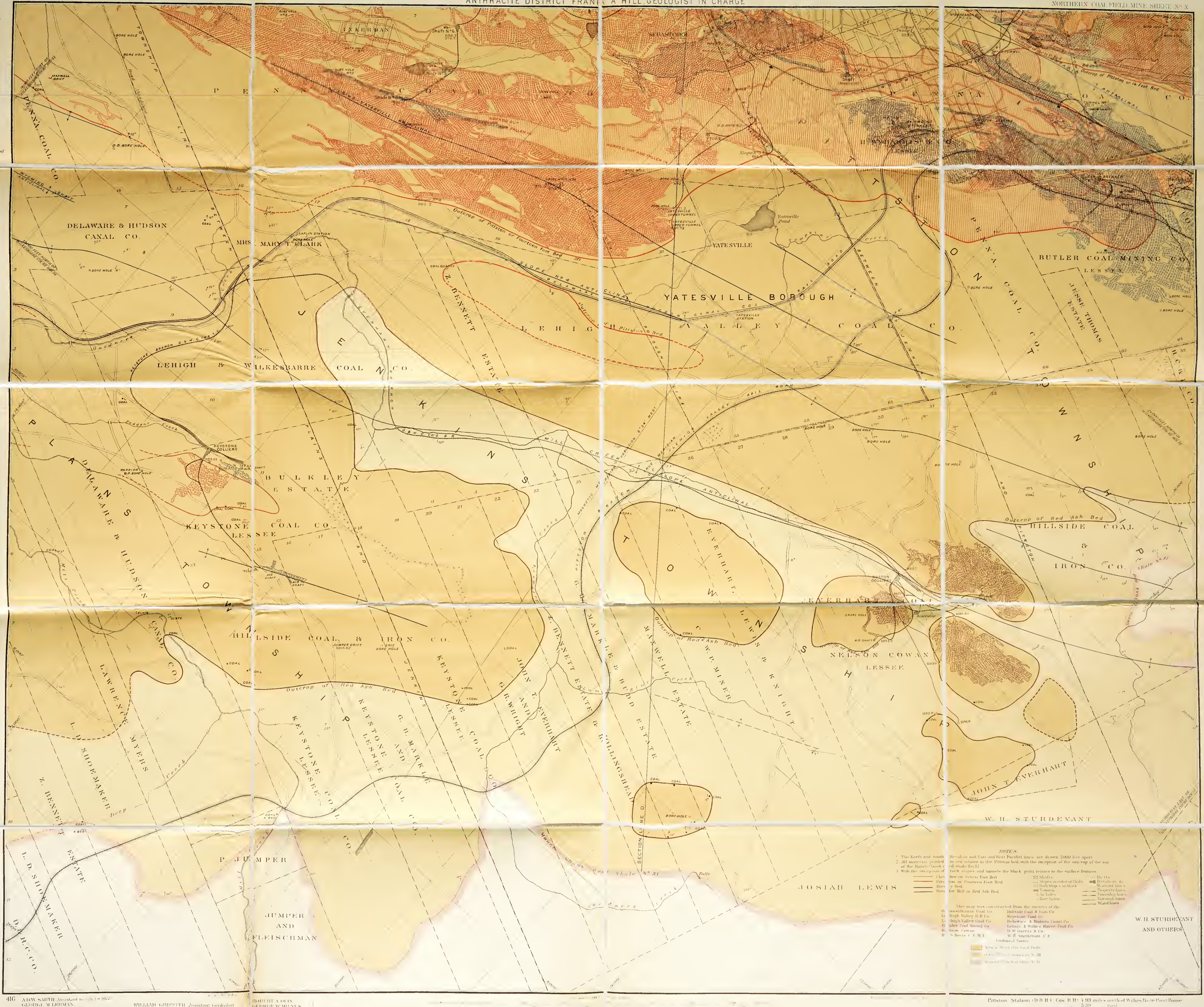
ANTHRACITE DISTRICT FRANK A HILL, GEOLOGIST IN CHARGE

NORTHERN COAL FIELD, MINE SHEET No X.

SECTION OF COAL MEASURES.
YATESVILLE SHEET.
No 4 SHAFT AND
FAIRMOUNT SHAFT
PENN'A COAL CO AND
H. W HARRIS & CO



Scale 100' - 1"



NOTES.

1 The North and South Meridian and East and West Parallel lines are drawn 2000 feet apart
2. All material printed in red relates to the Pittston bed, with the exception of the outcrop of the top of the Mauch Chunk red shale No. XI
3 With the exception of rock slopes and tunnels the black print relates to the surface features

Checker or Seven Foot Bed	Shafts	Drifts	
Pittston or Fourteen Foot Bed	Slopes in color of Beds	Breakers &c	
Marcy Bed	Rock Slopes in black	Warrant lines	
Powder Mill or Red Ash Bed	Tunnels	Property lines	
	Air holes	Township lines	
	Bore holes	Borough lines	
		Ward lines	

This map was constructed from the surveys of the

Pennsylvania Coal Co	Hillside Coal & Iron Co
Lehigh Valley R.R Co	Keystone Coal Co
Lehigh Valley Coal Co	Delaware & Hudson Canal Co
Butler Coal Mining Co	Lehigh & Wilkes Barre Coal Co
Nelson Cowan	H W Harris & Co.
B S Reets C & M E	W H Sturdevant C E

Geological Survey

▭ Area of Workable Coal Beds
▭ Pottsville Conglomerate No XII
▭ Mauch Chunk Red Shale No XI

416 A D W SMITH Assistant to July 1st 1887
GEORGE M LEHMAN
EDWARD M KEATLEY
J F MERKLE } Aids
BOND V SOMERVILLE

WILLIAM GRIFFITH Assistant Geologist (since July 1st 1887)

ROBERT A OLIN
GEORGE W MILNES
WILBUR F SMITH } Assistants
HENRY L CURTIS
HOWELL J FISHER

AUGUST, 1887.

Pittston Station (D & H C Cos R R) 4.93 miles north of Wilkes Barre Court House
5.39 east
Latitude of Monument Wilkes Barre Court House yard (observed) 41° 14' 30" 48
Longitude east of Washington 1° 10' 5" 6

ATLAS NORTHERN ANTHRACITE FIELD. PART 2. MINE SHEET NO. IX. 3.

AA.

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P38m
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Atlas
V 1, pl 3
Geology

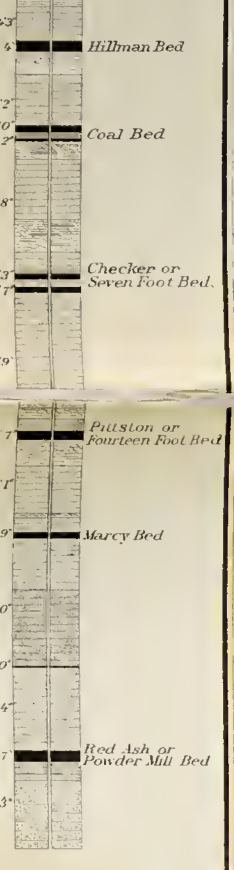
GEOLOGICAL SURVEY OF PENNSYLVANIA. J. P. LESLEY, STATE GEOLOGIST

ANTHRACITE DISTRICT FRANK A. HILL, GEOLOGIST IN CHARGE

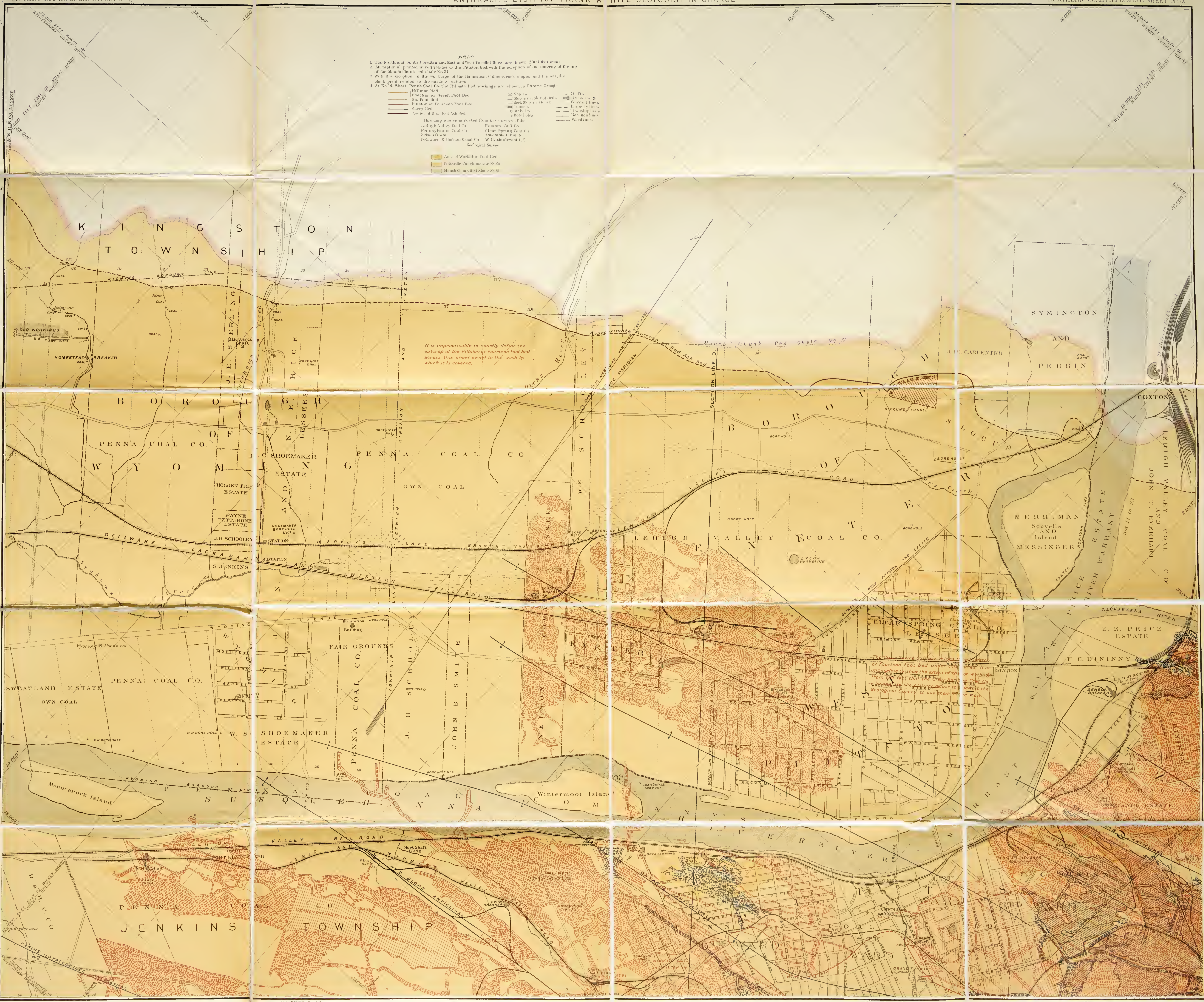
WYOMING BASIN, LUZERNE COUNTY.

NORTHERN COAL FIELD, MINE SHEET Nº IX

SECTION OF COAL MEASURES.
PITTSTON SHEET.
COOPER & ABBOTT FARM BORE HOLE,
NEAR PORT BLANCHARD.
PENN'A COAL CO.



Scale 100 = 1"



NOTES

1. The North and South Meridian and East and West Parallel lines are drawn 2000 feet apart
2. All material printed in red relates to the Pittston bed, with the exception of the outcrop of the top of the Mauch Chunk red shale No. XI
3. With the exception of the workings of the Homestead Colliery, rock slopes and tunnels, the black print relates to the surface features
4. At No 14 Shaft Penn'a Coal Co. the Hillman bed workings are shown in Chrome Orange

Hillman Bed
Checker or Seven Foot Bed
Six Foot Bed
Pittston or Fourteen Foot Bed
Marcy Bed
Powder Mill or Red Ash Bed

Shafts
Slopes in color of Beds
Rock Slopes in black
Tunnels
○ Air holes
○ Bore holes

Drifts
Breakers &c
Warrant lines
Property lines
Township lines
Borough lines
Ward lines

This map was constructed from the surveys of the
Lehigh Valley Coal Co. — Pittston Coal Co
Pennsylvania Coal Co — Clear Spring Coal Co
Nelson Cowan — Shoemaker Estate
Delaware & Hudson Canal Co — W. H. Sturdevant C.E.
Geological Survey

🟨 Area of Workable Coal Beds
🟨 Pottsville Conglomerate Nº XII
🟨 Manch Chunk Red Shale Nº XI

A. D. W. SMITH, Assistant to July 1 1887
GEORGE M. LEHMAN
EDWARD M. KEATLEY
J. F. MERKLE
BOND V. SOMERVILLE } Aids

WILLIAM GRIFFITH, Assistant Geologist (since July 1st 1887)

ROBERT A. QUIN
GEORGE W. MILNES
WILBUR F. SMITH
HENRY L. CURTIS
HOWELL T. FISHER } Assistants

Scale 800 Feet to 1 Inch

1/9600 of Nature

AUGUST, 1887

Corner Main and Water Streets Pittston 5.42 miles north of Wilkes Barre Court House
4.64 east
Latitude of Monument Wilkes Barre Court House yard (observed) 41° 14' 30". 48
Longitude " " " " east of Washington 1° 10' 37". 6

ATLAS NORTHERN ANTHRACITE FIELD. PART 2. MINE SHEET NO. 11.

2.

A A.

557 Geology
P38m
A A
Atlas
V, pt 2

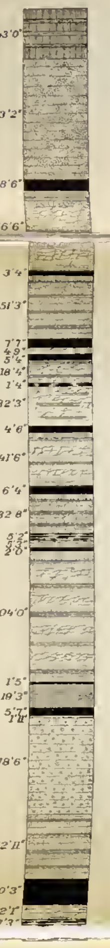
SECOND GEOLOGICAL SURVEY OF PENNSYLVANIA. J. P. LESLEY, STATE GEOLOGIST.

WYOMING BASIN, LUZERNE COUNTY.

ANTHRACITE DISTRICT. CHARLES A. ASHBURNER, GEOLOGIST IN CHARGE

NORTHERN COAL FIELD MINE SHEET, No. II.

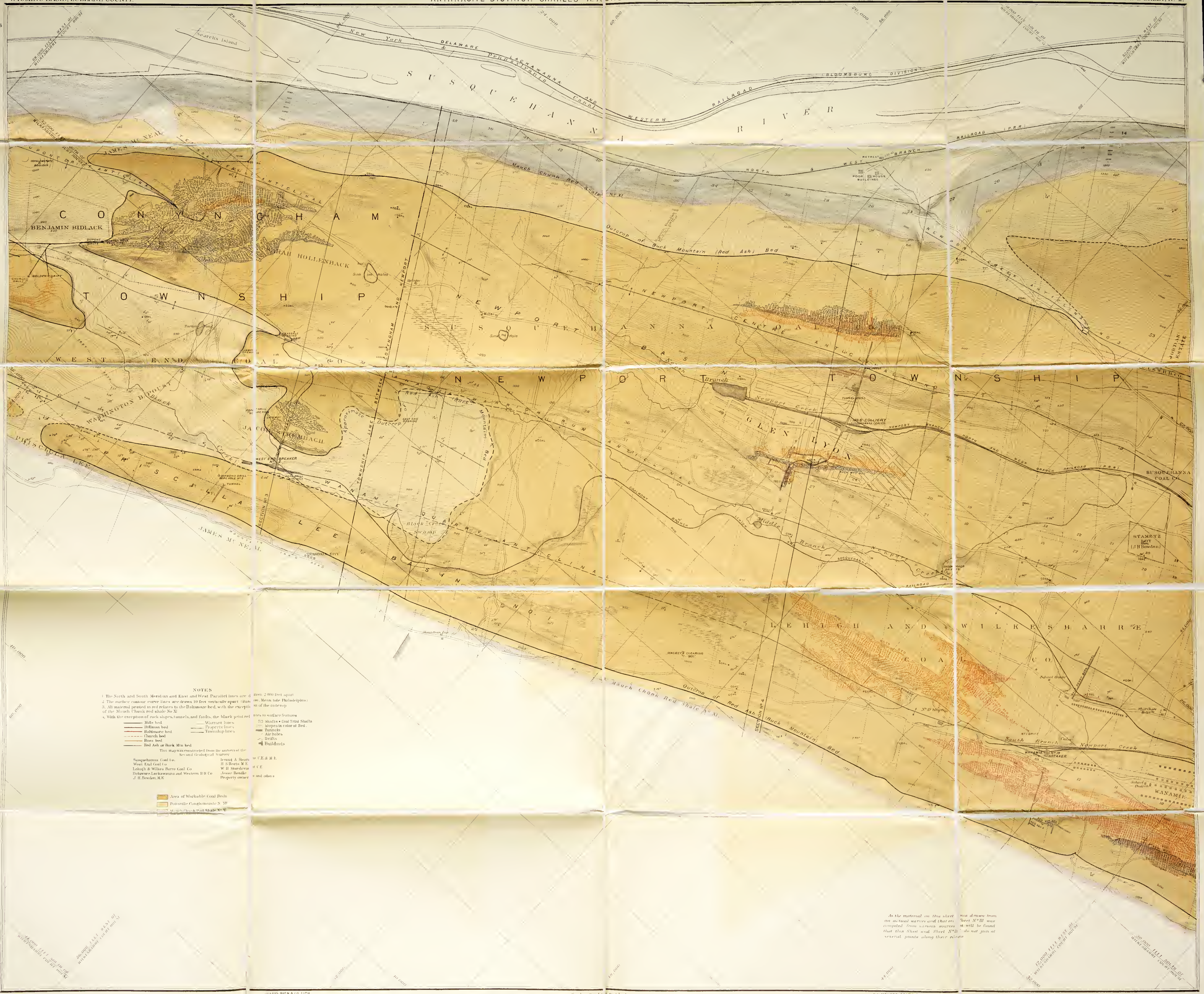
SECTION OF COAL MEASURES
NEWPORT SHEET
No. 6 SHAFT
SUSQUEHANNA COAL CO



Scale 100' = 1"

NOTE.

An exact identification of the Coal beds in the No. 6 Shaft is, in the present stage of developement impossible



NOTES

1. The North and South Meridian and East and West Parallel lines are d rawn 2 000 feet apart
2. The surface contour curve lines are drawn 10 feet vertically apart (Dat um. Mean tide Philadelphia)
3. All material printed in red relates to the Baltimore bed, with the exceptio n of the outcrop of the Mauch Chunk red shale No XI
4. With the exception of rock slopes, tunnels, and faults, the black print rel ates to surface features

▬	Mills bed
▬	Hillman bed
▬	Baltimore bed
- - -	Church bed
▬	Ross bed
▬	Red Ash or Buck Mtn bed
▬	Warrant lines
▬	Property lines
▬	Township lines
☒	Shafts • Coal Trial Shafts
- - -	Slopes in color of Bed.
▬	Tunnels
◦	Air holes
⌐	Drifts
■	Buildings

This map was constructed from the surveys of the Second Geological Survey

Susquehanna Coal Co.
West End Coal Co
Lehigh & Wilkes Barre Coal Co
Delaware, Lackawanna and Western R R Co
J. H. Bowden, M.E.
Irving A. Stear ns C.E. & M.E.
H. S Reets M.E.
W. H. Sturdevant C.E.
Jesse Beadle
Property owner s and others

▨	Area of Workable Coal Beds
☐	Pottsville Conglomerate No. XII
☐	Mauch Chunk Red Shale No. XI

As the material on this sheet was drawn from an actual survey and that on Sheet No. III was compiled from various sources it will be found that this Sheet and Sheet No. III do not join at several points along their edges

ASSISTANT GEOLOGIST. FRANK A. HILL

ASSISTANTS { JOHN C. BRANNER
GEORGE M. LEHMAN
A. D. W. SMITH }

JULIUS BIEN & CO. LITH

Scale - 800 Feet to 1 Inch
9600th of Nature

E. K. MEYERS STATE PRINTER

FEBRUARY 1887

Glen Lyon Colliery (No 6) Breaker	4.97 miles south of Wilkes Barre Court House			
" " " "	9.75 west " " " "			
Latitude of Monument, Wilkes Barre Court House yard (observed)		41°	14	40".48
Longitude	east of Washington	1°	10	3".6

ATLAS NORTHERN ANTHRACITE FIELD. PART 2. COLUMNAR SECTION SHEET NO. V. 7.

A.A.

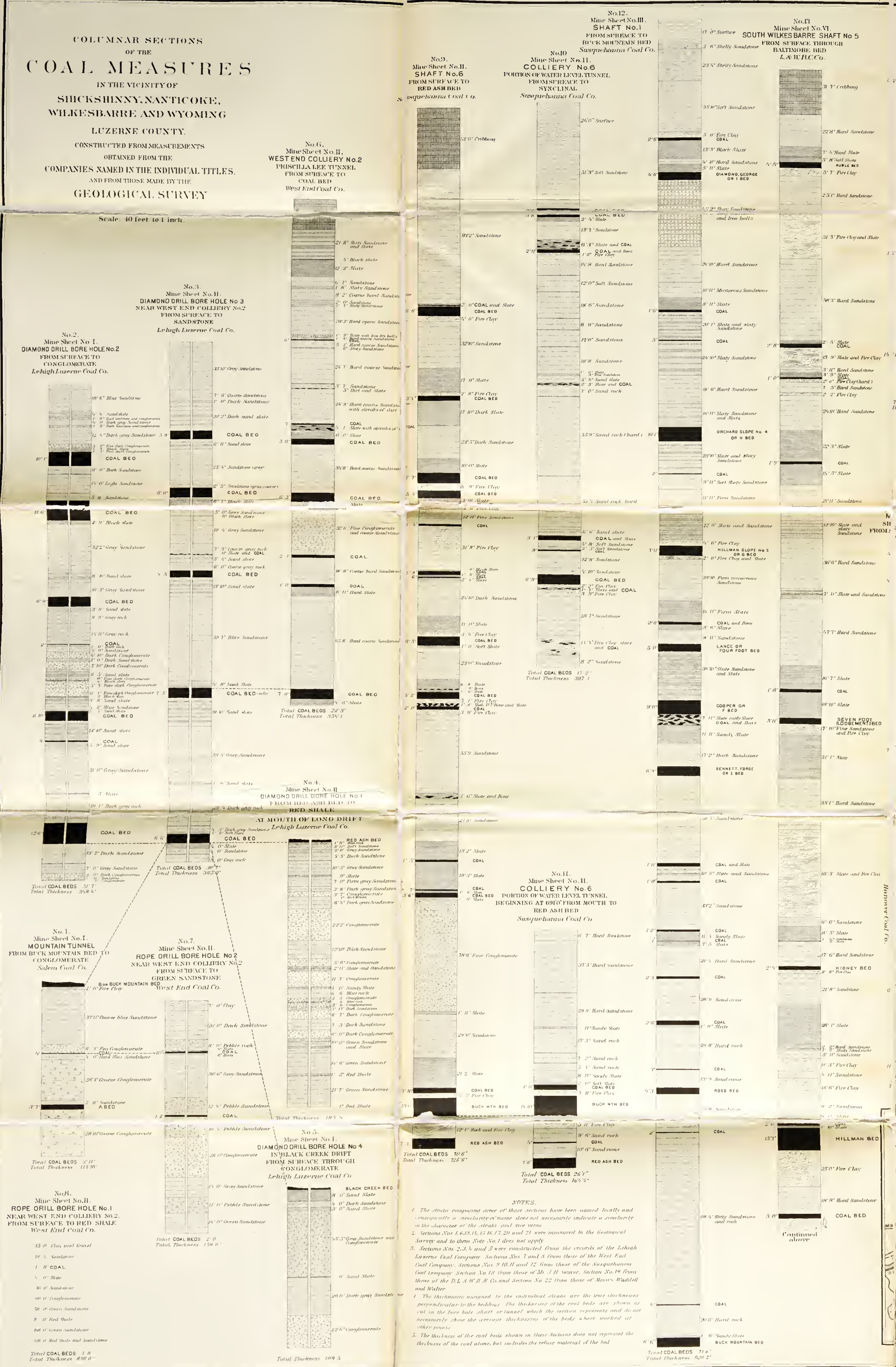
557 F33m AA Atlas v.1, pt 2 Geology

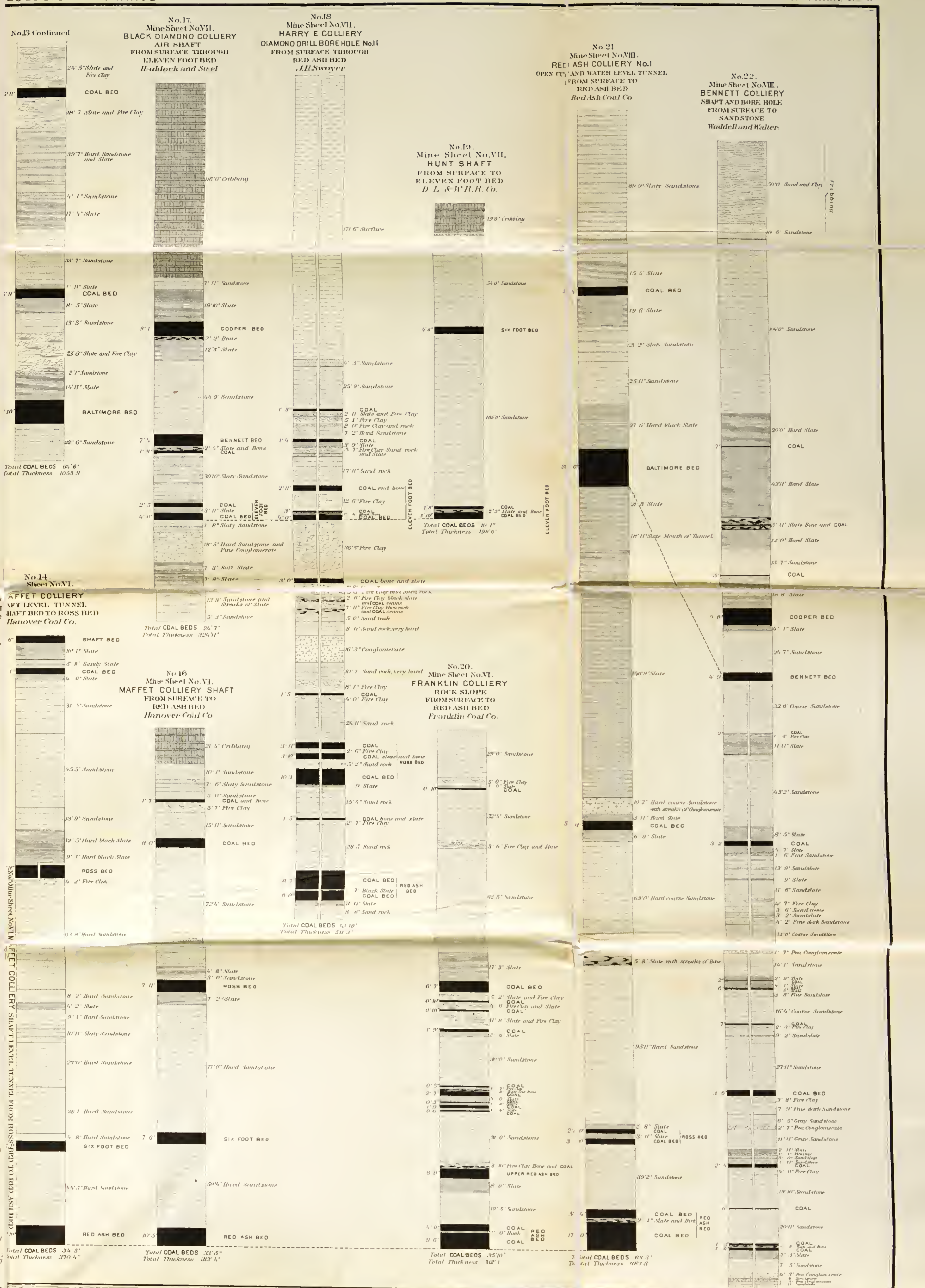
GEOLOGICAL SURVEY OF PENNSYLVANIA. J. P. LESLEY, STATE GEOLOGIST

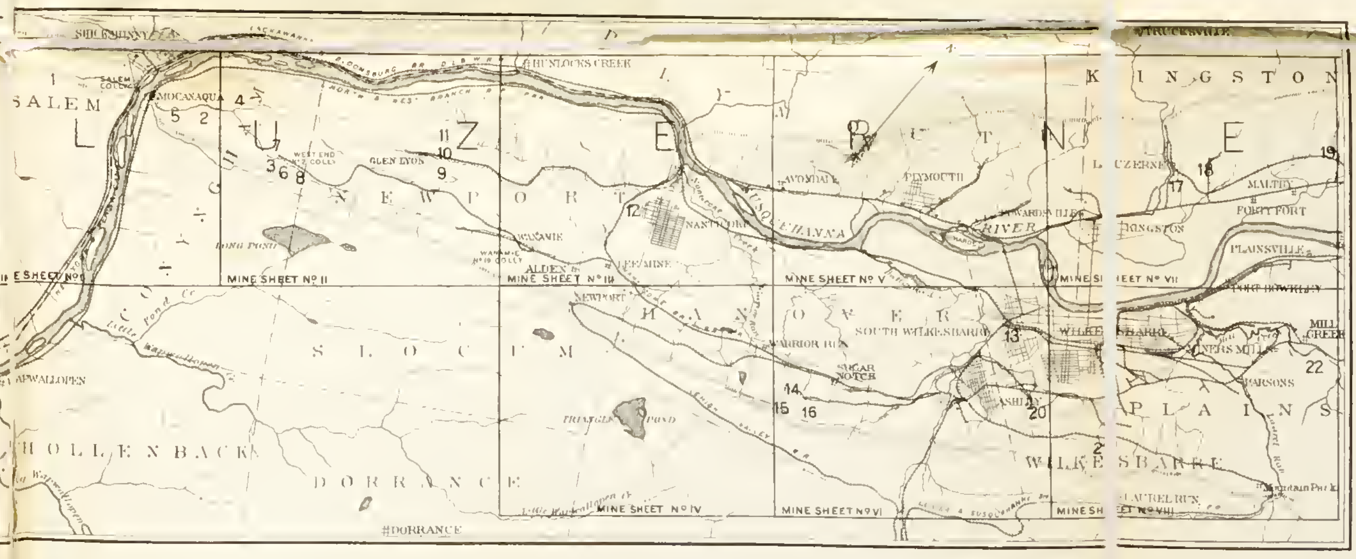
ANTHRACITE DISTRICT. FRANK A. HILL, GEOLOGIST IN CHARGE

COLUMNAR SECTIONS
OF THE
COAL MEASURES
IN THE VICINITY OF
SHICKSHINNY, NANTICOKE,
WILKESBARRE AND WYOMING
LUZERNE COUNTY.
CONSTRUCTED FROM MEASUREMENTS
OBTAINED FROM THE
COMPANIES NAMED IN THE INDIVIDUAL TITLES.
AND FROM THOSE MADE BY THE
GEOLOGICAL SURVEY

Scale: 40 feet to 1 inch.


No.2. Mine Sheet No.I. DIAMOND DRILL BORE HOLE No.2 FROM SURFACE TO CONGLOMERATE Lehigh Luzerne Coal Co.
No.3. Mine Sheet No.II. DIAMOND DRILL BORE HOLE No.3 NEAR WEST END COLLIERY No.2 FROM SURFACE TO SANDSTONE Lehigh Luzerne Coal Co.
No.6. Mine Sheet No.II. WEST END COLLIERY No.2 PRISCILLA LEE TUNNEL FROM SURFACE TO COAL BED West End Coal Co.
No.9. Mine Sheet No.II. SHAFT No.6 FROM SURFACE TO RED ASH BED Susquehanna Coal Co.
No.10. Mine Sheet No.II. COLLIERY No.6 PORTION OF WATER LEVEL TUNNEL FROM SURFACE TO SYNCLINAL Susquehanna Coal Co.
No.12. Mine Sheet No.III. SHAFT No.1 FROM SURFACE TO BUCK MOUNTAIN BED Susquehanna Coal Co.
No.13. Mine Sheet No.VI. SOUTH WILKES BARRE SHAFT No 5 FROM SURFACE THROUGH BALTIMORE BED L.&W.B.C.Co.
No.4. Mine Sheet No.II. DIAMOND DRILL BORE HOLE No.1 FROM RED ASH BED TO RED SHALE AT MOUTH OF LONG DRIFT Lehigh Luzerne Coal Co.
No.11. Mine Sheet No.II. COLLIERY No.6 PORTION OF WATER LEVEL TUNNEL BEGINNING AT 6910' FROM MOUTH TO RED ASH BED Susquehanna Coal Co.
No.1. Mine Sheet No.I. MOUNTAIN TUNNEL FROM BUCK MOUNTAIN BED TO CONGLOMERATE Salem Coal Co.
No.7. Mine Sheet No.II. ROPE DRILL BORE HOLE No.2 NEAR WEST END COLLIERY No.2 FROM SURFACE TO GREEN SANDSTONE West End Coal Co.
No.5. Mine Sheet No.I. DIAMOND DRILL BORE HOLE No.4 IN BLACK CREEK DRIFT FROM SURFACE THROUGH CONGLOMERATE Lehigh Luzerne Coal Co.
No.8. Mine Sheet No.II. ROPE DRILL BORE HOLE No.1 NEAR WEST END COLLIERY No.2 FROM SURFACE TO RED SHALE West End Coal Co.
Total COAL BEDS 71'6"
Total Thickness 725'6"
Total COAL BEDS 26'7"
Total Thickness 164'4"
Total COAL BEDS 71'6"
Total Thickness 928'2"
Total COAL BEDS 1'8"
Total Thickness 836'0"
Total Thickness 109'5"
Continued above


No.13 Continued
Total COAL BEDS 96'6"
Total Thickness 1053'9"
No.17. Mine Sheet No.VII. BLACK DIAMOND COLLIERY AIR SHAFT FROM SURFACE THROUGH ELEVEN FOOT BED Haddock and Steel
No.18. Mine Sheet No.VII. HARRY E COLLIERY DIAMOND DRILL BORE HOLE No.11 FROM SURFACE THROUGH RED ASH BED J.H.Swoyer
No.19. Mine Sheet No.VII. HUNT SHAFT FROM SURFACE TO ELEVEN FOOT BED D.L.&W.R.R.Co.
No.21. Mine Sheet No.VIII. RED ASH COLLIERY No.1 OPEN CUT AND WATER LEVEL TUNNEL FROM SURFACE TO RED ASH BED Red Ash Coal Co.
No.22. Mine Sheet No.VIII. BENNETT COLLIERY SHAFT AND BORE HOLE FROM SURFACE TO SANDSTONE Waddell and Walter.
No.14. Mine Sheet No.VI. MAFFET COLLIERY WATER LEVEL TUNNEL FROM SHAFT BED TO ROSS BED Hanover Coal Co.
No.16. Mine Sheet No.VI. MAFFET COLLIERY SHAFT FROM SURFACE TO RED ASH BED Hanover Coal Co.
No.20. Mine Sheet No.VI. FRANKLIN COLLIERY ROCK SLOPE FROM SURFACE TO RED ASH BED Franklin Coal Co.
ELEVEN FOOT BED
Total COAL BEDS 28'11"
Total Thickness 720'7"



SKELETON MAP
OF
THE AREAS COVERED BY
MINE SHEETS Nos I. TO VIII
SHOWING THE
POSITION OF THE COLUMNAR SECTIONS
ON SHEET V
Scale 2 miles to 1 inch

NOTES.

1. The strata composing some of these sections have been named locally and consequently a similarity of name does not necessarily indicate a similarity in the character of the strata and vice versa.
2. Sections Nos 1. 6. 13. 14. 15. 16. 17. 20 and 21 were measured by the Geological Survey and to them Note No. 1 does not apply.
3. Sections Nos 2. 3. 4 and 5 were constructed from the records of the Lehigh Luzerne Coal Company. Sections Nos 7 and 8 from those of the West End Coal Company. Sections Nos 9. 10. 11 and 12 from those of the Susquehanna Coal Company. Section No 18 from those of Mr. J. H. Swoyer. Section No. 19 from those of the D. L. & W. R. R. Co. and Section No 22 from those of Messrs Waddell and Walter.
4. The thicknesses assigned to the individual strata are the true thicknesses perpendicular to the bedding. The thicknesses of the coal beds are shown as cut in the bore hole, shaft or tunnel which the section represents and do not necessarily show the average thicknesses of the beds where worked at other points.
5. The thickness of the coal beds shown in these Sections does not represent the thickness of the coal alone, but includes the refuse material of the bed.

Scale of Coal Measure Sections 40 Feet to 1 Inch
FEET 40 0 40 80 120 160 200
10 0 10 20 30 50 60 METERS
1/480 of Nature
MARCH

WILLIAM GRIFFITH Assistant Geologist

ROBERT A. QUIN
GEORGE W. MILNES
EDWARD M. KEATLEY
WILBUR F. SMITH
} Assistants

JULIUS BIEN & CO. LITH

E. K. MEYERS, STATE PRINTER

REFERENCE SURVEY MAPS AND SECTIONS
NORTHERN COAL FIELD
MINE SHEETS Nos I. AND II (ATLAS PART II)
MINE SHEETS Nos III. VI. VII. AND VIII (ATLAS PART I)
CROSS SECTION SHEETS

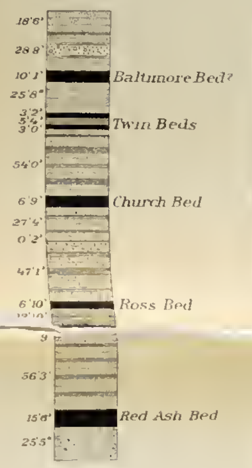
SECOND GEOLOGICAL SURVEY OF PENNSYLVANIA. J. P. LESLEY, STATE GEOLOGIST

ANTHRACITE DISTRICT. CHARLES A. ASHBURNER, GEOLOGIST IN CHARGE

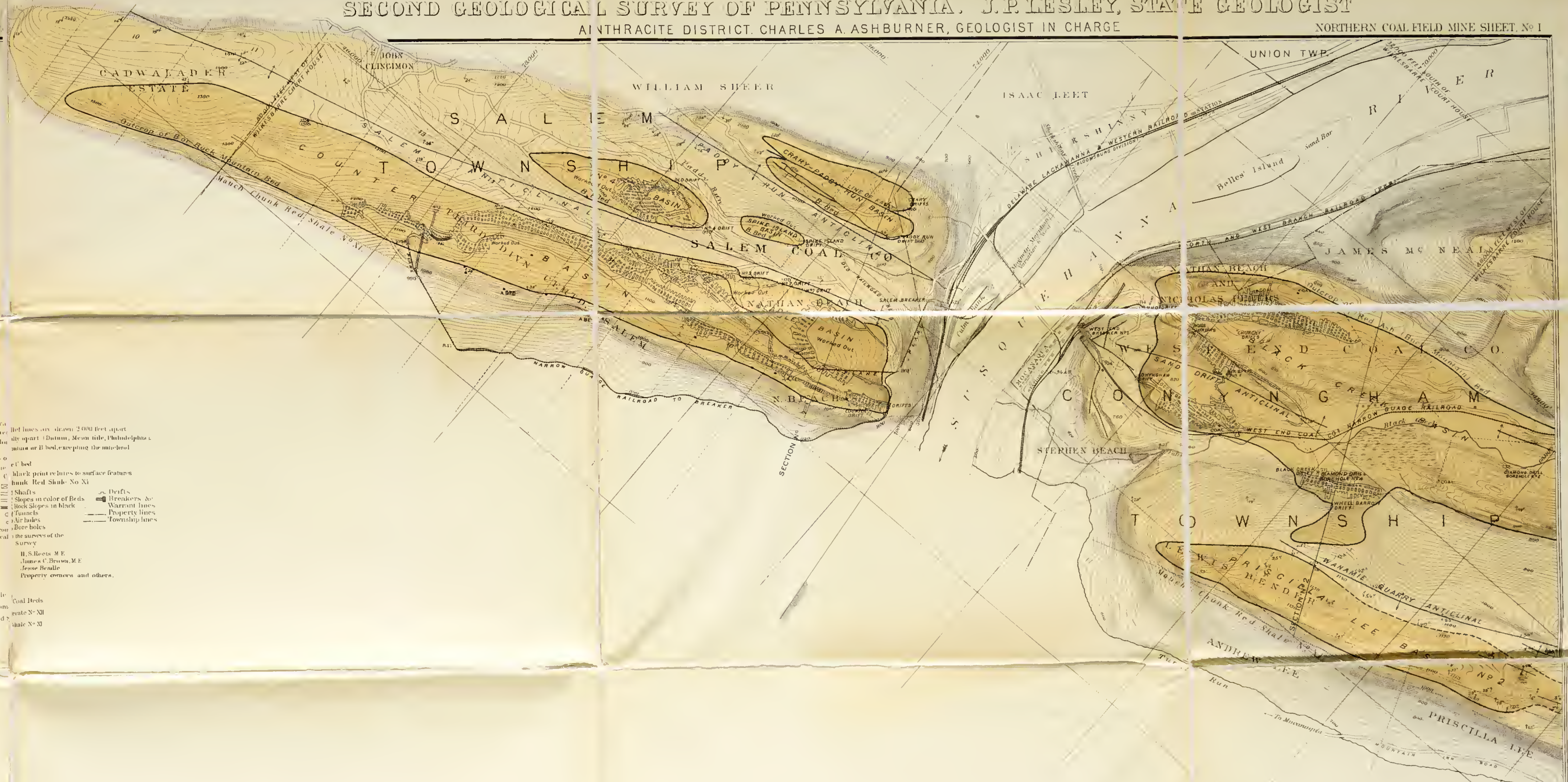
WYOMING BASIN, LUZERNE COUNTY.

NORTHERN COAL FIELD MINE SHEET. No. 1

SECTION OF COAL MEASURES
SHICKSHINNY SHEET
DIAMOND DRILL BORE HOLE No. 2.
WEST END COAL CO.



Scale 100'=1"



NOTES

1. The North and South Meridian and East and West Parallel lines are drawn 2000 feet apart
2. The surface contour curve lines are drawn 10 feet vertically apart (Datum, Mean tide, Philadelphia)
3. All material printed in blue relates to the Red Ash, Buck Mountain or B bed, excepting the anticlinal and synclinal lines
4. All material printed in chrome orange relates to the Ross or C bed
5. With the exception of rock slopes, tunnels, and faults, the black print relates to surface features
6. The red stipple relates to the outcrop of the Mauch Chunk Red Shale No XI

Church or D bed
Ross or C bed
Red Ash Buck Mtn. or B bed

Shafts
Slopes in color of Beds
Rock Slopes in black
Tunnels
Air holes
Bore holes

Drifts
Breakers &c
Warrant lines
Property lines
Township lines

This map was constructed from the surveys of the
Second Geological Survey

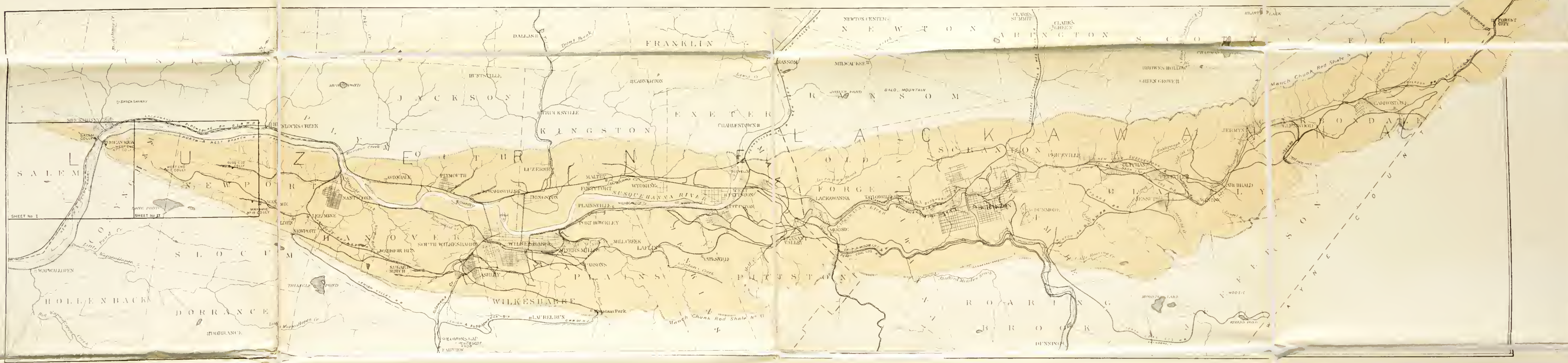
West End Coal Co.
Salem Coal Co.
Irving A. Stearns, C. E. & M. E.
W. H. Sturdevant, C. E.

H. S. Reets M. E.
James C. Brown, M. E.
Jesse Beadle
Property owners and others.

▨	Area of Workable Coal Beds
▨	Pottsville Conglomerate No XII
☐	Mauch Chunk Red Shale No XI

SKELETON MAP OF THE NORTHERN COAL FIELD IN LUZERNE AND LACKAWANNA COUNTIES.

SHOWING POSITIONS OF MINE SHEETS Nos. I AND II SOUTHWEST OF NANTICOKE



Scale 2 miles to 1 inch

ASSISTANT GEOLOGIST FRANK A. HILL
ASSISTANTS GEORGE M. LEHMAN
A. D. W. SMITH

JULIUS BIEN & CO. LITH

Scale - 800 Feet to 1 Inch

E. K. MEYERS STATE PRINTER

Shickshinny Railroad Station 6.43 miles south of Wilkes Barre Court House
13.59 west
Latitude of Monument Wilkes Barre Court House yard (observed) 41° 14' 40".48
Longitude east of Washington 1° 10' 3".6

FEBRUARY 1887

ATLAS NORTHERN ANTHRACITE FIELD. PART 2. COLUMNAR SECTION SHEET NO. VI.

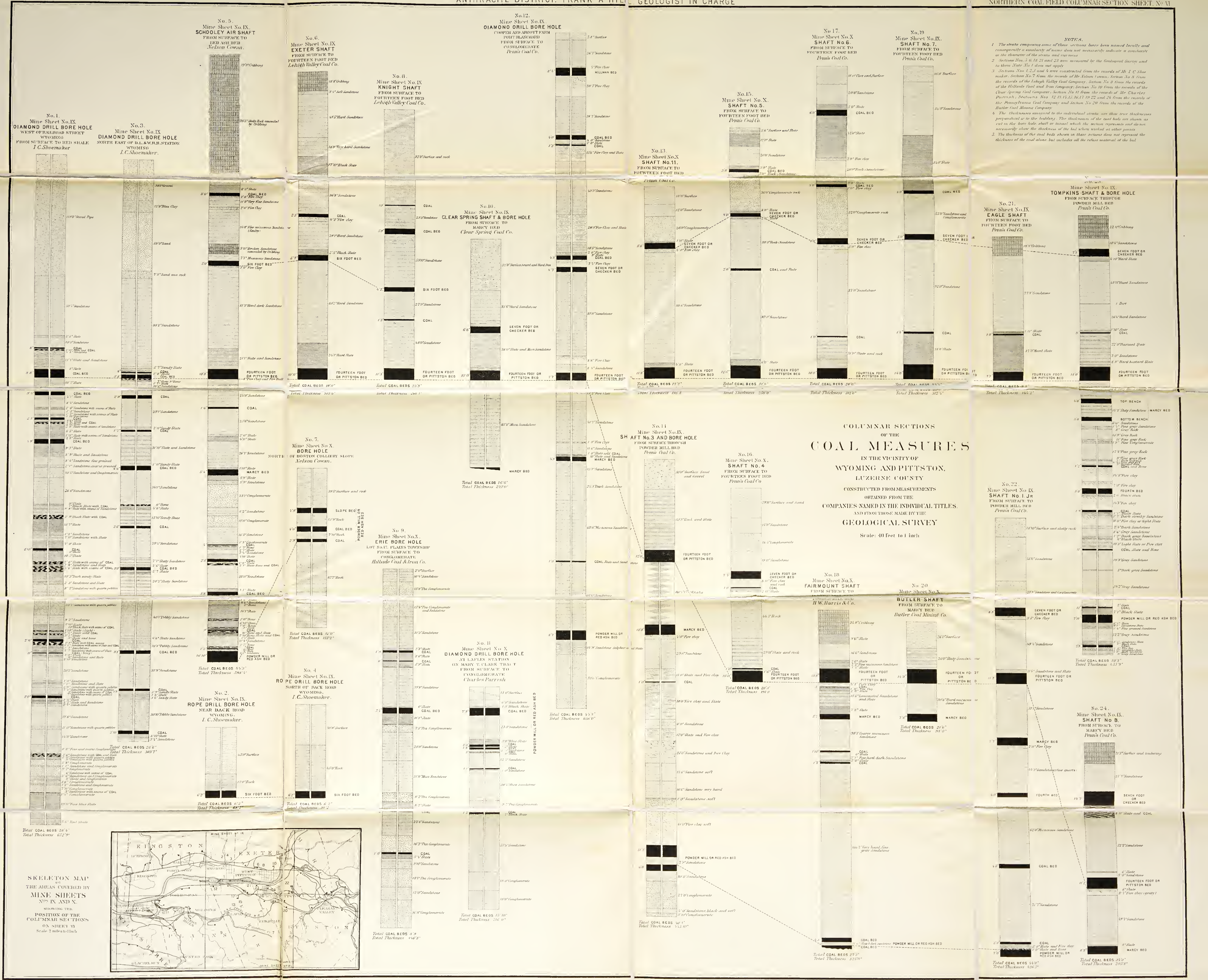
8.

AA.

557
P38m
AA
Atlas
V.4 pt.2
Geology

GEOLOGICAL SURVEY OF PENNSYLVANIA. J. P. LESLEY, STATE GEOLOGIST

ANTHRACITE DISTRICT. FRANK A. HILL, GEOLOGIST IN CHARGE


No. 1. Mine Sheet No. IX. DIAMOND DRILL BORE HOLE WEST OF RAILROAD STREET WYOMING FROM SURFACE TO RED SHALE I. C. Shoemaker
Total COAL BEDS 28'4" Total Thickness 652'9"
No. 3. Mine Sheet No. IX DIAMOND DRILL BORE HOLE NORTH EAST OF D.L.&W.R.R. STATION WYOMING. I. C. Shoemaker.
No. 5. Mine Sheet No. IX. SCHOOLEY AIR SHAFT FROM SURFACE TO RED ASH BED Nelson Cowan.
No. 6. Mine Sheet No. IX EXETER SHAFT FROM SURFACE TO FOURTEEN FOOT BED Lehigh Valley Coal Co.
No. 8. Mine Sheet No. IX KNIGHT SHAFT FROM SURFACE TO FOURTEEN FOOT BED Lehigh Valley Coal Co.
No. 12. Mine Sheet No. IX DIAMOND DRILL BORE HOLE COOPER AND ABBOTT FARM PORT BLANCHARD FROM SURFACE TO CONGLOMERATE Penn'a Coal Co.
No. 10. Mine Sheet No. IX CLEAR SPRING SHAFT & BORE HOLE FROM SURFACE TO MARCY BED Clear Spring Coal Co.
No. 13. Mine Sheet No. X SHAFT No. 11. FROM SURFACE TO FOURTEEN FOOT BED Penn'a Coal Co.
No. 15. Mine Sheet No. X. SHAFT No. 5. FROM SURFACE TO FOURTEEN FOOT BED Penn'a Coal Co.
No. 17. Mine Sheet No. X SHAFT No. 6. FROM SURFACE TO FOURTEEN FOOT BED Penn'a Coal Co.
No. 19. Mine Sheet No. IX. SHAFT No. 7. FROM SURFACE TO FOURTEEN FOOT BED Penn'a Coal Co.
No. 21. Mine Sheet No. IX. EAGLE SHAFT FROM SURFACE TO FOURTEEN FOOT BED Penn'a Coal Co.
No. 23. Mine Sheet No. IX. TOMPKINS SHAFT & BORE HOLE FROM SURFACE THROUGH POWDER MILL BED Penn'a Coal Co.
No. 7. Mine Sheet No. X. BORE HOLE NORTH OF BOSTON COLLIERY SLOPE Nelson Cowan.
No. 9. Mine Sheet No. X. ERIE BORE HOLE LOT No. 47. PLAINS TOWNSHIP FROM SURFACE TO CONGLOMERATE Hillside Coal & Iron Co.
No. 4. Mine Sheet No. IX. ROPE DRILL BORE HOLE NORTH OF BACK ROAD WYOMING. I. C. Shoemaker.
No. 2. Mine Sheet No. IX. ROPE DRILL BORE HOLE NEAR BACK ROAD WYOMING. I. C. Shoemaker.
No. 11. Mine Sheet No. X. DIAMOND DRILL BORE HOLE AT LAFLIN STATION ON MARY T. CLARK TRACT FROM SURFACE TO CONGLOMERATE Charles Parrish
No. 14. Mine Sheet No. IX. SHAFT No. 3 AND BORE HOLE FROM SURFACE THROUGH POWDER MILL BED Penn'a Coal Co.
No. 16. Mine Sheet No. X. SHAFT No. 4 FROM SURFACE TO FOURTEEN FOOT BED Penn'a Coal Co.
No. 18 Mine Sheet No. X. FAIRMOUNT SHAFT FROM SURFACE TO [illegible] H. W. Harris & Co.
No. 20 Mine Sheet No. X. BUTLER SHAFT FROM SURFACE TO MARCY BED Butler Coal Mining Co.
No. 22. Mine Sheet No. IX SHAFT No. 1 Jr. FROM SURFACE TO POWDER MILL BED Penn'a Coal Co.
No. 24. Mine Sheet No. IX. SHAFT No. 8. FROM SURFACE TO MARCY BED Penn'a Coal Co.
FOURTEEN FOOT OR PITTSTON BED
SEVEN FOOT OR CHECKER BED
POWDER MILL OR RED ASH BED
MARCY BED
KINGSTON
EXETER
PLAINS
WILKES BARRE
PITTSTON
MINE SHEET No. X
LAUREL RUN
MOUNTAIN PARK

COLUMNAR SECTIONS
OF THE
COAL MEASURES
IN THE VICINITY OF
WYOMING AND PITTSTON,
LUZERNE COUNTY

CONSTRUCTED FROM MEASUREMENTS
OBTAINED FROM THE
COMPANIES NAMED IN THE INDIVIDUAL TITLES,
AND FROM THOSE MADE BY THE
GEOLOGICAL SURVEY

Scale: 40 feet to 1 inch

NOTES.

1. The strata composing some of these sections have been named locally and consequently a similarity of name does not necessarily indicate a similarity in the character of the strata and vice versa.
2. Sections Nos. 5, 6, 18, 21 and 23 were measured by the Geological Survey and to them Note No. 1 does not apply.
3. Sections Nos. 1, 2, 3 and 4 were constructed from the records of Mr. I. C. Shoemaker; Section No. 7 from the records of Mr. Nelson Cowan; Section No. 8 from the records of the Lehigh Valley Coal Company; Section No. 9 from the records of the Hillside Coal and Iron Company; Section No. 10 from the records of the Clear Spring Coal Company; Section No. 11 from the records of Mr. Charles Parrish; Sections Nos. 12, 13, 14, 15, 16, 17, 19, 22 and 24 from the records of the Pennsylvania Coal Company and Section No. 20 from the records of the Butler Coal Mining Company.
4. The thicknesses assigned to the individual strata are their true thicknesses perpendicular to the bedding. The thicknesses of the coal beds are shown as cut in the bore hole, shaft or tunnel which the section represents and do not necessarily show the thickness of the bed where worked at other points.
5. The thickness of the coal beds shown in these sections does not represent the thickness of the coal alone, but includes all the refuse material of the bed.

SKELETON MAP
OF
THE AREAS COVERED BY
MINE SHEETS
Nos IX AND X.
SHOWING THE
POSITION OF THE
COLUMNAR SECTIONS
ON SHEET VI
Scale 2 miles to 1 inch

WILLIAM GRIFFITH, Assistant Geologist

Assistants
ROBERT A. QUIN
GEORGE W. MILNES
WILBUR F. SMITH

JULIUS BIEN & CO. LITH

Scale of Coal Measure Sections 40 Feet to 1 Inch

FEET 10 20 40 80 120 160 200

10 0 10 20 30 60 METERS

1/480 of Nature

JANUARY 1888

E. K. MEYERS, STATE PRINTER

REFERENCE SURVEY MAPS AND SECTIONS
NORTHERN COAL FIELD { MINE SHEETS Nos IX AND X
CROSS SECTION SHEETS.

ATLAS NORTHERN ANTHRACITE FIELD, PART 2. MINE SHEET NO. XI.

6.

AA.

Geology
557
P38m
AA
Atlas
v. 1, pt 2

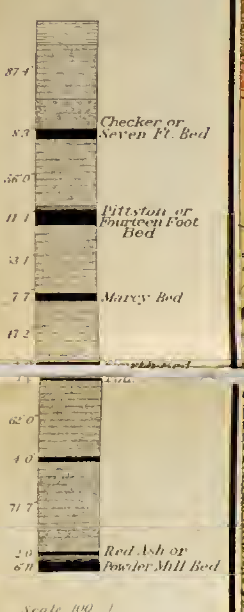
GEOLOGICAL SURVEY OF PENNSYLVANIA. J. P. LESLEY, STATE GEOLOGIST

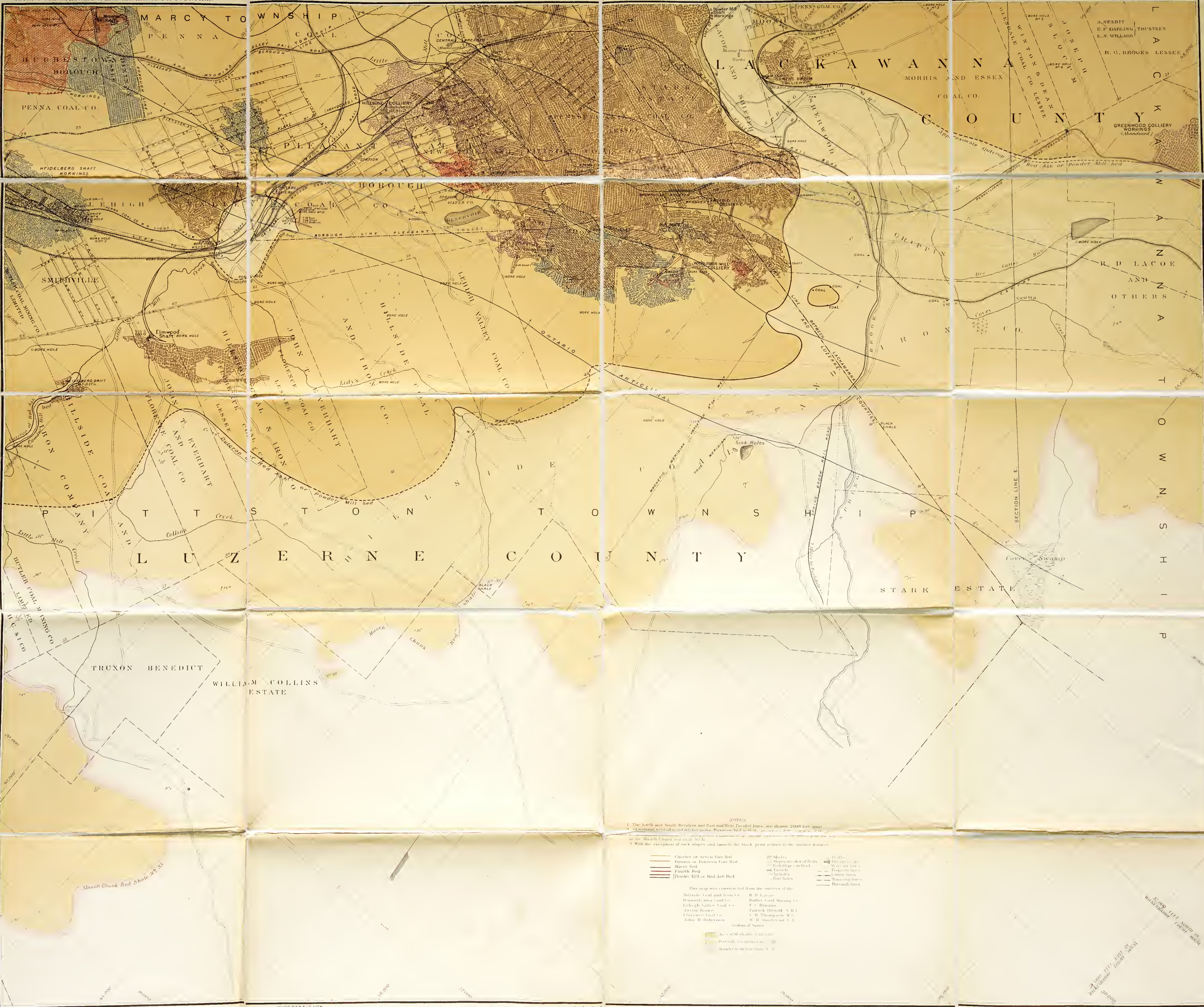
ANTHRACITE DISTRICT. FRANK A. HILL, GEOLOGIST IN CHARGE

WYOMING BASIN, LUZERNE AND LACKAWANNA COUNTIES.

NORTHERN COAL FIELD. MINE SHEET No. XII

ECTION OF COAL MEASURES
PLEASANT VALLEY SHEET.
SHAFT NO. I JR
PENNA. COAL CO.





NOTES

1 The North and South Meridian and East and West Parallel lines are drawn 2000 feet apart
2 All material printed in red relates to the Pittston bed with the exception of the [illegible] of the Mauch Chunk red shale No XI
3 With the exception of rock slopes and tunnels the black print relates to the surface features

Checker or Seven Foot Bed
Pittston or Fourteen Foot Bed
Marcy Bed
Fourth Bed
Powder Mill or Red Ash Bed

Shafts
Slopes in color of Beds
Rock Slopes in black
Tunnels
Air holes
Bore holes

Drifts
Breakers &c
Worked out lines
Property lines
County lines
Township lines
Borough lines

This map was constructed from the surveys of the

Hillside Coal and Iron Co	R. D. Lacoe
Pennsylvania Coal Co	Butler Coal Mining Co
Lehigh Valley Coal Co	F. C. Dininny
Austin Moore	Patrick Blewitt C. & M. E.
Florence Coal Co	C. W. Thompson M. E.
John M. Robertson	W. R. Sturdevant C. E.

Geological Survey

Area of Workable Coal Beds
Pottsville Conglomerate No XII
Mauch Chunk Red Shale No XI

418 GEORGE M. LEHMAN Assistant to July 1st 1887
A. D. W. SMITH
EDWARD M. KEATLEY
J. F. MERKLE
BOND V. SOMERVILLE } Aids.

WILLIAM GRIFFITH Assistant Geologist (since July 1st 1887)

JULIUS BIEN & CO. LITH

ROBERT A. QUIN
WILBER E. SMITH
GEORGE W. MILNES
HENRY L. CURTIS } Assistants

Scale = 800 Feet to 1 Inch
$\frac{1}{9600}$ of Nature

AUGUST, 1887

E. K. MEYERS STATE PRINTER

Pleasant Valley Station (D & H C Co's R.R.) 6.10 miles north of Wilkes Barre Court House
7.01 east
Latitude of Monument, Wilkes Barre Court House yard observed 41° 15' 50" 48
Longitude east of Washington 1° 10' 6